

This level of detail is used throughout all subsections of the four chapters in the second part of the book, which is concluded with an appendix dealing with the statistics of description and sampling. This is adequate, but would have been improved with more examples and by having references in the text rather than merely in a bibliography at the end.

This book brings together information and methods of survey from a variety of disciplines, and, as such, helps to fill a gap created by the incorporation of ecological and environmental factors in land-use decision-making. First and foremost it is a textbook, indeed a valuable one, for tertiary-education courses in the multi-disciplinary field of land management. It will also be a useful addition to the libraries of managers who are working in the field today.

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Promethean Ethics: Living With Death, Competition and Triage, by GARRETT HARDIN. University of Washington Press, Seattle, Washington, and London, UK: viii + 82 pp., 14.5 × 22.3 × 1.8 cm, \$ 9.95, 1980.

Garrett Hardin has borrowed the name 'Prometheus'—which means 'fore-thinker'—as a way of telling his readers that in ethical decision-making, what counts is to study the probable consequences for posterity first, rather than plunge in and hope for the best: 'The task of Prometheus—our task—is vicariously to know ahead of time what is too much of each good thing, so that we do not make the mistake of striving for the bad of too much good' (p. 9). Thereby hangs not the traditional treatise on ethics that the title suggests, but a series of challenging if often disappointing reflections on the meaning of death and the circumstances under which we ought to allow or even help people to die; the advantages and ultimate compassion of allowing virtually unlimited competition in business and elsewhere; and the reasons for making some people suffer now 'for the sake of a brighter future for others or for themselves' (p. 64).

In the end, it matters less what Professor Hardin actually says about these uncomfortable topics than that he recognizes the urgent need to raise them. He sees Prometheus as an ecologist, concerned therefore with the improvement of the environment as well as just its protection, and anyone with such concerns will face the problems which this book raises—and, for that matter, even someone who disagrees with everything Professor Hardin has to say will find the problems still crying out for solutions.

As one difficulty among many, it is simply a fact that two recently-proclaimed universal human rights can lead to disaster: the first of these is self-determination by individual families, the practical consequence of which is overbreeding; the second right is freedom from hunger. What, then, happens when all the mouths cannot be fed? Whether the reader likes this situation or not, we have a case in which application of an undoubtedly good notion—people should be free to live the way they want to—combines with application of another good notion—people should at least get enough to eat—to set up a scenario in which those who have food, but not

enough, may have to decide who dies of hunger. As Professor Hardin points out, it won't do to ignore the possibility by crying out that someone will have to play God: The fact is that, within the foreseeable future, someone probably *will*, and it behoves us to give careful thought to how.

I can only wish that Professor Hardin had done his subject matter justice. I found passages that were so poorly organized, or loosely reasoned, or even evasive, that nobody except a true believer could take them seriously. For instance, the first sentence of Chapter I reads, 'When we deal with the deepest problems of human existence we always discover there is something more to learn from the ancients'. It is immediately followed by the challenging but undeveloped philosophical point that, 'Ethics is the study of the ways to allocate scarce resources'. The connection remains dubious for quite a while, leaving the reader 'at sea'.

Here is another passage: 'In the commercial world, product differentiation is functionally the same as ecological differentiation. The waste products of one industry are the raw materials of another (niche multiplication). The success of television, for example, created a niche for *TV Guide*, which made its promoter rich....' (p. 46). Since when is consumer demand for more information about a service considered a waste product? The garbage-collecting and scrap-iron industries make the point intended much more satisfactorily.

And last, in some places Professor Hardin does not seem to recognize—or evades—difficulties. A special offender is his argument supporting legalized abortion, in which he maintains that abortion of an unborn foetus or embryo does not kill a human being. He starts out by noting (pp. 16–7) that an embryo, which he compares to a 'replaceable blueprint', exhibits 'easily observable' differences from a child that has been born: without specifying what these differences are, he concludes on the basis of them that an embryo is just 'a nearly valueless set of information for a structure that will be valuable in the future'. No matter what the reader's position on legalized abortion, this passage ignores a vital criteriological issue: we may not know how to resolve the issue, but we had better start by facing it.

Professor Hardin has written a book that, whatever its deficiencies, will force the reader to think hard. I am sorry that so distinguished a spokesman for what is coming more and more to look like the side of the angels, did not in this case do his own cause justice.

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Production Ecology of British Moors and Montane Grasslands, Edited by O. W. HEAL & D. F. PERKINS. (Ecological Studies 27.) Springer-Verlag, Berlin–Heidelberg–New York: xii + 426 pp., figs and tables, 24.7 × 17 × 2.6 cm, DM 108 or US\$ 54, 1978.

This volume presents a synthesis of studies carried out under the International Biological Programme at Moor House in the north of England and Snowdon in North Wales, with supporting studies on other moorland areas and lowland heaths. The object of these studies was to 'investigate the basic production parameters of